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 W.A.M. Aarnink, A. Weishaupt and A. van Silfhout, Angle-resolved X-ray photoelectron spectroscopy (ARXPS) and a modified Levenberg-Marquardt fit procedure: a new combination for modeling thin layers 45 (1990) 37  
 G. Ranga Rao and C.N.R. Rao, Adsorption of nitrogen on clean and modified single-crystal Ni surfaces 45 (1990) 65  
 D.R. Baer, R.L. Gordon and C.W. Hubbard, Work function and UPS study of Au and O on Re 45 (1990) 71  
 A.R. Gonzalez-Elipé, J.P. Espinos, A. Fernandez and G. Munuera, XPS study of the surface carbonation/hydroxylation state of metal oxides 45 (1990) 103  
 Ch. Cardinaud and G. Turban, Mechanistic studies of the initial stages of etching of Si and SiO<sub>2</sub> in a CHF<sub>3</sub> plasma 45 (1990) 109  
 R.V. Siriwardane and J.A. Poston, Interaction of H<sub>2</sub>S with zinc titanate in the presence of H<sub>2</sub> and CO 45 (1990) 131  
 S.C. Tjong, A surface study of the passivation of Fe-Cr-Co magnet alloys in sulphuric acid solution 45 (1990) 141  
 J. Lausmaa, B. Kasemo, H. Mattsson and H. Odelius, Multi-technique surface characterization of oxide films on electropolished and anodically oxidized titanium 45 (1990) 189  
 B.C. Beard, Cellulose nitrate as a binding energy reference in N(1s) XPS studies of nitrogen-containing organic molecules 45 (1990) 221  
 Xin Xu and J.I. Steinfeld, UV-laser photodeposition of iron films from Fe(CO)<sub>5</sub>: role of gas-phase and surface dissociation processes 45 (1990) 281  
 S.C. Tjong, Self-passivation of Fe-Cr-PGM alloys in reducing acids studied



- by electrochemical and electron spectroscopic techniques 45 (1990) 301
- P. Ptáček and Z. Bastl, XPS characterization of supported bimetallic palladium-silver clusters 45 (1990) 319
- D.E. King, J.E. Fernandez and W.E. Swartz, An XPS study of the doping of trans, trans-p-distyrylbenzene with AsF<sub>5</sub>: a model conducting polymer system 45 (1990) 325
- G. Moretti, S. De Rossi and G. Ferraris, Characterization of well dispersed copper species on the surface of ZnO by X-ray photoelectron spectroscopy 45 (1990) 341
- J.L. Chartier, A. Serrari, R. Le Bihan, M. Ligeon, F. Gaspard and F. Muller, Thermal nitridation of anodic silicon dioxide 45 (1990) 351
- Platinum**
- W. Unger, G. Lietz, H. Lieske and J. Völter, SIMS and FAB-MS surface studies of Pt-Sn/Al<sub>2</sub>O<sub>3</sub> and Pt<sub>3</sub>Pb model catalysts 45 (1990) 29
- S. Deckers, F.H.P.M. Habraken, W.F. van der Weg, A.W. Denier van der Gon, J.F. van der Veen and J.W. Geus, Oxidation-induced segregation at the Pt<sub>0.5</sub>Ni<sub>0.5</sub>(111) surface studied by medium-energy ion scattering 45 (1990) 121
- S. Deckers, F.H.P.M. Habraken, W.F. van der Weg and J.W. Geus, Oxidation of clean and Pt-covered Ni(111) 45 (1990) 207
- Polymers**
- M. Wolpers, H. Viefhaus and M. Stratmann, SEM and SAM imaging of silane LB films on metallic substrates 45 (1990) 167
- D.E. King, J.E. Fernandez and W.E. Swartz, An XPS study of the doping of trans, trans-p-distyrylbenzene with AsF<sub>5</sub>: a model conducting polymer system 45 (1990) 325
- Rhenium**
- D.R. Baer, R.L. Gordon and C.W. Hubbard, Work function and UPS study of Au and O on Re 45 (1990) 71
- Rhodium**
- J.H. Craig, Jr. and J. Lozano, Effect of oxygen on chemisorption of CO on Rh(100) 45 (1990) 151
- W.G. Durrer, J.H. Craig, Jr. and J. Lozano, Surface carbon and its effects on hydrogen adsorption on Rh(100) 45 (1990) 275
- Secondary ion mass spectroscopy**
- W. Unger, G. Lietz, H. Lieske and J. Völter, SIMS and FAB-MS surface studies of Pt-Sn/Al<sub>2</sub>O<sub>3</sub> and Pt<sub>3</sub>Pb model catalysts 45 (1990) 29
- J. Lausmaa, B. Kasemo, H. Mattsson and H. Odelius, Multi-technique surface characterization of oxide films on electropolished and anodically oxidized titanium 45 (1990) 189
- Silane**
- R.M. Wallace, C.C. Cheng, P.A. Taylor, W.J. Choyke and J.T. Yates, Jr., Ni impurity effects on hydrogen surface chemistry and etching of Si(111) 45 (1990) 201
- Silicon**
- Ch. Cardinaud and G. Turban, Mechanistic studies of the initial stages of etching of Si and SiO<sub>2</sub> in a CHF<sub>3</sub> plasma 45 (1990) 109
- R.M. Wallace, C.C. Cheng, P.A. Taylor, W.J. Choyke and J.T. Yates, Jr., Ni impurity effects on hydrogen surface chemistry and etching of Si(111) 45 (1990) 201
- Silicon carbide**
- I. Kusunoki, M. Hiroi, T. Sato, Y. Igari and S. Tomoda, SiC film formation on Si(001) by reaction with C<sub>2</sub>H<sub>2</sub> beams 45 (1990) 171
- Silicon oxide**
- W.A.M. Aarnink, A. Weishaupt and A. van Silfhout, Angle-resolved X-ray photoelectron spectroscopy (ARXPS) and a modified Levenberg-Marquardt fit procedure: a new combination for modeling thin layers 45 (1990) 37

- Ch. Cardinaud and G. Turban, Mechanistic studies of the initial stages of etching of Si and SiO<sub>2</sub> in a CHF<sub>3</sub> plasma  
J.L. Chartier, A. Serrari, R. Le Bihan, M. Ligeon, F. Gaspard and F. Muller, Thermal nitridation of anodic silicon dioxide

45 (1990) 109

45 (1990) 351

### Silver

- A. Bukaluk and W. Bała, AES depth profile studies of interdiffusion in thin polycrystalline Au-Ag multilayer films  
P. Ptáček and Z. Bastl, XPS characterization of supported bimetallic palladium-silver clusters

45 (1990) 57

45 (1990) 319

### Steel

- A. Elbiache and P. Marcus, Adsorption and surface segregation of sulphur on Fe-17Cr-12.6Ni(100) and Fe-17Cr-14.5Ni-2.3Mo(100) alloys

45 (1990) 49

### Sulphur

- A. Elbiache and P. Marcus, Adsorption and surface segregation of sulphur on Fe-17Cr-12.6Ni(100) and Fe-17Cr-14.5Ni-2.3Mo(100) alloys

45 (1990) 49

### Superconductivity

- S.L.T. Andersson and J.C. Otamiri, Surface and bulk composition of YBa<sub>2</sub>Cu<sub>3</sub>O<sub>6+x</sub> compounds studied by XPS

45 (1990) 1

### Surface composition

- S.L.T. Andersson and J.C. Otamiri, Surface and bulk composition of YBa<sub>2</sub>Cu<sub>3</sub>O<sub>6+x</sub> compounds studied by XPS

45 (1990) 1

- W.A.M. Aarnink, A. Weishaupt and A. van Silfhout, Angle-resolved X-ray photoelectron spectroscopy (ARXPS) and a modified Levenberg-Marquardt fit procedure: a new combination for modeling thin layers

45 (1990) 37

- A.R. Gonzalez-Elipé, J.P. Espinos, A. Fernandez and G. Munuera, XPS

study of the surface carbonation/hydroxylation state of metal oxides

45 (1990) 103

- S. Deckers, F.H.P.M. Habraken, W.F. van der Weg, A.W. Denier van der Gon, J.F. van der Veen and J.W. Geus, Oxidation-induced segregation at the Pt<sub>0.5</sub>Ni<sub>0.5</sub>(111) surface studied by medium-energy ion scattering

45 (1990) 121

- S.C. Tjong, A surface study of the passivation of Fe-Cr-Co magnet alloys in sulphuric acid solution

45 (1990) 141

### Surface plasmons

- T.S. Jones, M.Q. Ding, N.V. Richardson and C.F. McConville, The effects of surface damage on surface plasmon excitations in doped InSb(100)

45 (1990) 85

### Surface segregation

- A. Elbiache and P. Marcus, Adsorption and surface segregation of sulphur on Fe-17Cr-12.6Ni(100) and Fe-17Cr-14.5Ni-2.3Mo(100) alloys

45 (1990) 49

- S. Deckers, F.H.P.M. Habraken, W.F. van der Weg, A.W. Denier van der Gon, J.F. van der Veen and J.W. Geus, Oxidation-induced segregation at the Pt<sub>0.5</sub>Ni<sub>0.5</sub>(111) surface studied by medium-energy ion scattering

45 (1990) 121

### Surface structure

- T.S. Jones, M.Q. Ding, N.V. Richardson and C.F. McConville, The effects of surface damage on surface plasmon excitations in doped InSb(100)

45 (1990) 85

### Thermal desorption

- J.H. Craig, Jr. and J. Lozano, Effect of oxygen on chemisorption of CO on Rh(100)

45 (1990) 151

- R.M. Wallace, C.C. Cheng, P.A. Taylor, W.J. Choyke and J.T. Yates, Jr., Ni impurity effects on hydrogen surface chemistry and etching of Si(111)

45 (1990) 201

- W.G. Durrer, J.H. Craig, Jr. and J. Lozano, Surface carbon and its effects on hydrogen adsorption on Rh(100)

45 (1990) 275

*Thin films*

- J. Rickards, A. Oliver, J. Miranda and E.P. Zironi, Uses of PIXE at low proton energies 45 (1990) 155
- I. Kusunoki, M. Hiroi, T. Sato, Y. Igari and S. Tomoda, SiC film formation on Si(001) by reaction with C<sub>2</sub>H<sub>2</sub> beams 45 (1990) 171
- J. Lausmaa, B. Kasemo, H. Mattsson and H. Odelius, Multi-technique surface characterization of oxide films on electropolished and anodically oxidized titanium 45 (1990) 189

*Titanium*

- J.C. Ingram, K.W. Nebesny and J.E. Pemberton, Optical properties of selected first-row transition metals determined by reflection electron energy loss spectroscopy 45 (1990) 247

*Titanium oxide*

- R.V. Siriwardane and J.A. Poston, Interaction of H<sub>2</sub>S with zinc titanate in the presence of H<sub>2</sub> and CO 45 (1990) 131
- J. Lausmaa, B. Kasemo, H. Mattsson and H. Odelius, Multi-technique surface characterization of oxide films on electropolished and anodically oxidized titanium 45 (1990) 189

*Tungsten*

- S.Yu. Shapoval, O.E. Balvinskii, I.V. Malikov, A.A. Chumakov and L.A.

- Niselson, Chemical vapour deposition of tungsten layers at low substrate temperatures 45 (1990) 257

*Vanadium*

- J.C. Ingram, K.W. Nebesny and J.E. Pemberton, Optical properties of selected first-row transition metals determined by reflection electron energy loss spectroscopy 45 (1990) 247

*Work function*

- D.R. Baer, R.L. Gordon and C.W. Hubbard, Work function and UPS study of Au and O on Re 45 (1990) 71

*X-ray emission*

- J. Rickards, A. Oliver, J. Miranda and E.P. Zironi, Uses of PIXE at low proton energies 45 (1990) 155

*Zinc oxide*

- A.R. de Wit, M.D. Janssen and J.J. Kelly, Electrochemical characterization of polycrystalline ZnO layers 45 (1990) 21
- R.V. Siriwardane and J.A. Poston, Interaction of H<sub>2</sub>S with zinc titanate in the presence of H<sub>2</sub> and CO 45 (1990) 131
- G. Moretti, S. De Rossi and G. Ferraris, Characterization of well dispersed copper species on the surface of ZnO by X-ray photoelectron spectroscopy 45 (1990) 341